✓141621

COMPARED

Warranty Deed

John Stephenson and wf

TO

Andrew Luoto
384 - 31st.
City

STATE OF OREGON, County of Clatsop } ss.

I certify that the within instrument was received for record on the 20th day of Dec 1918, at 11⁵⁰ o'clock A M., and recorded at page 309 of Book 96 of the Records of Deeds of and for said County.

Witness my hand and Seal of County affixed.

J. C. CLINTON
County Clerk

By Max W. Cole
Deputy

1–

~~ASTORIA ABSTRACT COMPANY~~

88.83.1

√ 4621

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County Clerk

By Max W. Pohl
Deputy

1 –

~~ASTORIA ABSTRACT COMPANY~~

STATE OF ~~OREGON,~~ Washington }
County ~~of Clatsop~~ Clarke } ss.

This Certifies, *That on this* 17th *day of* December - - - *A. D., 191*8, *before me, the undersigned, a Notary Public in and for said County and State, personally appeared the within named* John Stephensen and Hilja Stephensen, husband and wife, - - - - - - -

who are - - *known to me to be the identical person*s *named in, and who executed the within instrument, and acknowledged to me that* they *executed the same freely and voluntarily for the uses and purposes therein mentioned.*

In Witness Whereof, *I have hereunto set my hand and Notarial seal the day and year last above written.*

Jos. E. Hall.

N~~otary Public for Oregon~~.

NOTARY PUBLIC FOR THE STATE OF WASHINGTON
RESIDING AT BRUSH PRAIRIE, THEREIN

DOCUMENTARY INTERNAL REVENUE 1 DOLLAR

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and also all their *estate, right, title and interest in and to the same, including dower and claim of dower.*

To Have and To Hold *the above described and granted real property unto the said grantee -* , his - - - *heirs and assigns forever. And* We - - -, *the said grantor*s *above named, do covenant to and with the above named grantee -* , his *heirs and assigns, that* we are - - - - - *lawfully seized in fee simple of the above granted real property, that the same is free from all incumbrances,*

and that we - - *will and* our - - *heirs, executors and administrators shall warrant and forever defend the title to said real property and every part and parcel thereof against the lawful claims and demands of all persons whomsoever*

In Witness Whereof, We - - *the grantor* s *above named, have hereunto set* our - - *hand* s *and seal* s *this* 17th *day of* December, - - - - , *A. D., 191*8.

Signed, Sealed and Delivered in the
Presence of

Ed H Kangas
Jos. E. Hall.

John Stephensen [SEAL]
Hilja Stephensen [SEAL]
[SEAL]
[SEAL]

Know All Men By These Presents, *That* JOHN STEPHENSEN and HILJA STEPHENSEN, husband and wife, -, *who* are *hereinafter designated as the grantor* s *, in consideration of the sum of* Ten (10) - *-Dollars, and for other valuable considerations to* them *paid by* ANDREW LUOTO - - - - - - - - - - - - - - - - - -

who is *hereinafter designated as the grantee* - *, have bargained and sold, and by these presents do grant, bargain, sell and convey unto said grantee* - , his - - *heirs and assigns, all the following bounded and described real property, situated in the County of* Clatsop - - *and State of* Oregon, - - *to-wit:* -

The North One Hundred (100) feet of Lot numbered Six (6) of Block numbered One Hundred and Forty-nine (149) of the town (now city) of Astoria, as laid out and recorded by John M. Shively and later established by Decree of the Circuit Court of the State of Oregon for Clatsop County, and more particularly described as follows: - -

Commencing at the Northeasterly corner of said Lot Six (6), running thence Southeasterly along the boundary line between said Lot Six (6) and Lot Five (5) of said Block One Hundred and Forty-nine(149) a distance of One Hundred (100) feet, running thence Southwesterly on a line parallel to and with the boundary line between said Lot Six(6) and Lot Seven (7) of said Block One Hundred and Forty-nine (149) a distance of Fifty (50) feet to the boundary line between said Lot Six(6) and 31st Street, running thence Northwesterly along said boundary line to the Northwesterly corner of said Lot Six (6) and running thence Northeasterly on a straight line to the point of beginning.

FORM 0256

NOT TRANSFERABLE

NO. S 028021

UNITED STATES OF AMERICA

OFFICE OF

UNITED STATES FOOD ADMINISTRATOR

FISHERMAN'S LICENSE

LICENSE IS HEREBY GRANTED TO

ANDREW LUOTO

of ASTORIA, OREGON

to engage in the business of catching and distributing salt water fish, shellfish and crustaceans.

This license is subject to revocation at any time for violation of the rules and regulations prescribed by the President of the United States or by the United States Food Administrator, under the direction of the President, or for violation of any of the provisions of the act of Congress under which this license is issued.

This license, and the rules and regulations issued thereunder, shall cease to be in effect when the existing state of war between the United States and Germany shall have terminated and the fact of such termination shall have been proclaimed by the President.

Dated March 22, 1918.

UNITED STATES FOOD ADMINISTRATION,

By Herbert Hoover

United States Food Administrator.

U.S. POSTAL CARD
1 ONE CENT 1
MARTHA WASHINGTON

REPLY CARD
THIS SIDE OF CARD IS FOR ADDRESS

AMERICAN AUTOMOBILE DIGEST
22 E. TWELFTH ST.
CINCINNATI, OHIO.

CINCINNATI, OHIO
APR 16
6³⁰ PM
1924
4

U.S. POSTAL CARD
1 ONE CENT 1
WASHINGTON

THIS SIDE OF CARD IS FOR ADDRESS

Andrew Luoto,
1417 Franklin St.,
Astoria,
Ore.

88.83.5b

Andrew Suoto,
1417 Franklin St.,
Astoria, Ore.

AMERICAN AUTOMOBILE DIGEST,
Cincinnati, Ohio.

Complying with your request I have placed X mark in front of my occupation.

- ( )Garage Owner
- ( )Accessory Dealer
- ( )Accessory Jobber
- ( )Car Dealer
- ( )Service Station
- ( )Auto or Accessory Salesman
- ( )Auto Mechanic
- ( )Manufacturer of Motor Vehicles or Equipment.
- ( )Owner of Automobiles, Truck or Tractor.

WHAT CAR DO YOU DRIVE?
MAKE ________ MODEL __________ YEAR 19___.

88.83.5a

Date 4-16-24

Dear Sir:-

We thank you very much for your subscription, received today, and it will have our prompt attention.
However, there is one request that our Editor would like to make. It will take but one second of your time and will help him materially towards putting into the AMERICAN AUTOMOBILE DIGEST the kind of stories and articles you want. The attached self-addressed postal card bears your name and address. All he asks is that you mark an X mark in front of your occupation, or write it on the lower line and drop it in the mail box.

Thank you for this courtesy.

Respectfully,
AMERICAN AUTOMOBILE DIGEST.
Cincinnati, Ohio.

What You Should Know About Your Hudson Super-Six

Hudson Motor Car Co.
Detroit, Michigan, U. S. A.

Issued May, 1923

Prolonging the Life of Your Car

How a motor car is cared for in its first 1,000 miles, governs to a large extent the length and the satisfaction of its service.

In this critical period of its life, the car should not be driven at a speed of more than 25 miles an hour, and it should be generously lubricated. It is recommended, even thereafter, to approach higher speeds gradually.

We recommend that the oil in the crankcase be completely changed after the first 500 miles and every 1,000 miles thereafter. Other parts of the chassis should be lubricated according to the instructions given in the first few pages of this book.

After the first 1,000 miles running, it will prove profitable for the owner to have his car checked over by his dealer's service station. By this time the car is operating normally, and the proper adjustments can be easily made.

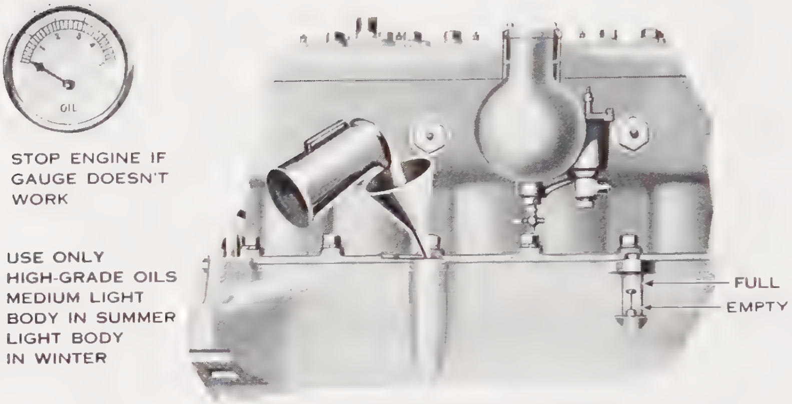
It will be advantageous to the owner too even though he is an experienced motorist to read this book through, and to develop the habit of treating his car with proper care and consideration.

By proper lubrication, which is too often neglected, and by following the other instructions in this book, the owner can do much to prolong the life of his car and thus realize the full value from his investment.

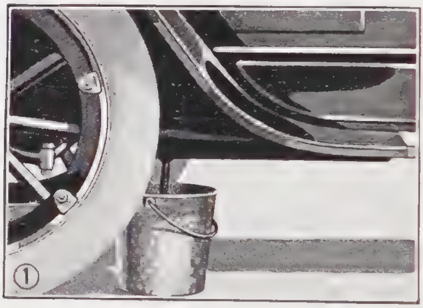
The oil gauge must always register when the motor is running. If it fails to do so, stop and investigate.

The ammeter should show charge when the car is traveling over ten miles an hour with the lights out.

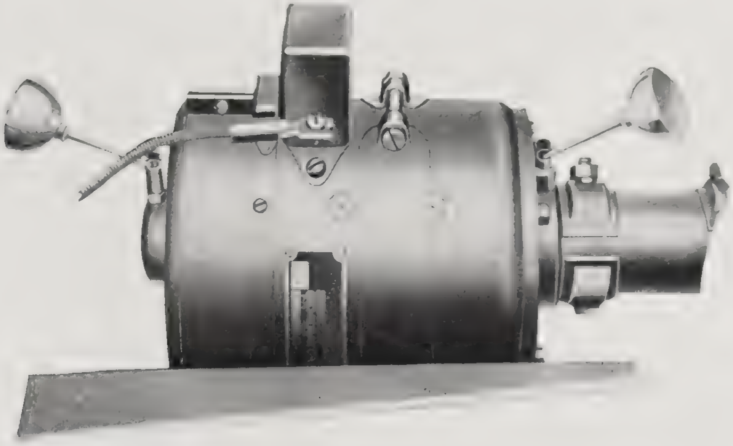
Motor Lubrication


OIL
STOP ENGINE IF GAUGE DOESN'T WORK
USE ONLY HIGH-GRADE OILS MEDIUM LIGHT BODY IN SUMMER LIGHT BODY IN WINTER
FULL
EMPTY

Motor Lubrication

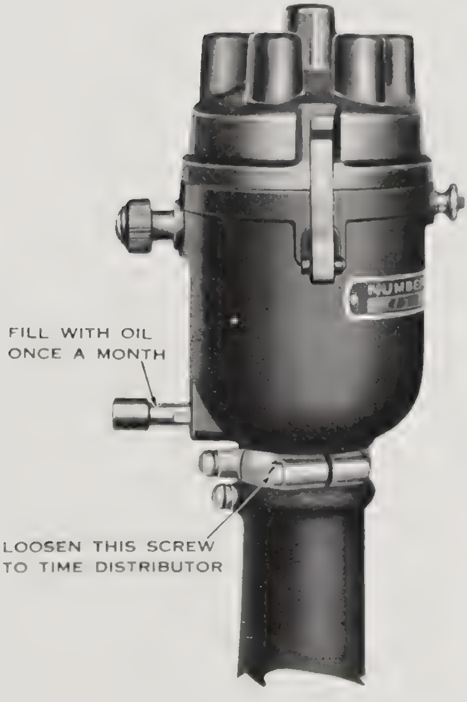


The importance of frequently draining the contents of the oil reservoir and refilling with new, clean oil cannot be overestimated. When the car is first placed in service this should be done when the speedometer reads 500 miles. Thereafter complete draining every 1000 miles is recommended. Drain plug is located in base of oil reservoir.

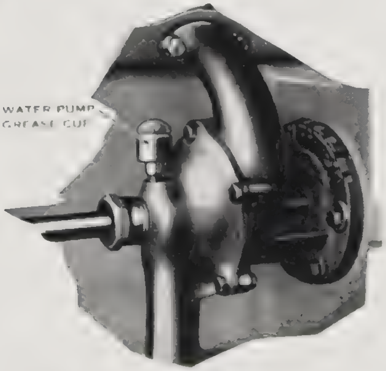


Generator

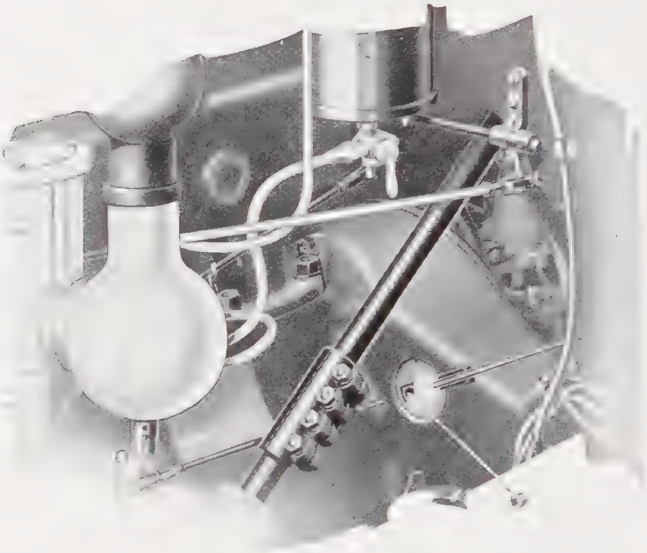
3 or 4 drops of light motor oil at points designated every 1000 to 1500 miles.


FILL WITH OIL ONCE A MONTH
LOOSEN THIS SCREW TO TIME DISTRIBUTOR

Fill distributor base by way of oil cup provided, once a month. Use light oil same as recommended for motor.

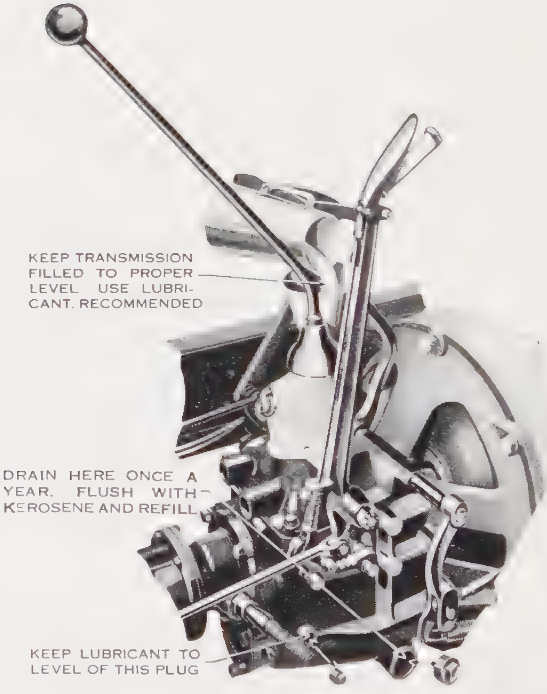


Keep water pump grease cup filled with hard grease. Turn down frequently.



Clutch

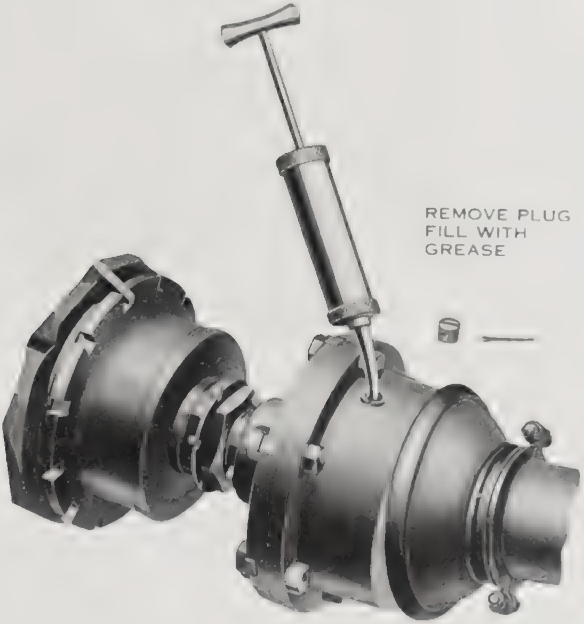
Every 2000 miles remove plug in flywheel drain, flush out with kerosene, drain again and refill with ½ pint of a mixture of kerosene and lubricating oil equal portions.


KEEP TRANSMISSION FILLED TO PROPER LEVEL USE LUBRICANT. RECOMMENDED
DRAIN HERE ONCE A YEAR. FLUSH WITH KEROSENE AND REFILL
KEEP LUBRICANT TO LEVEL OF THIS PLUG

Transmission

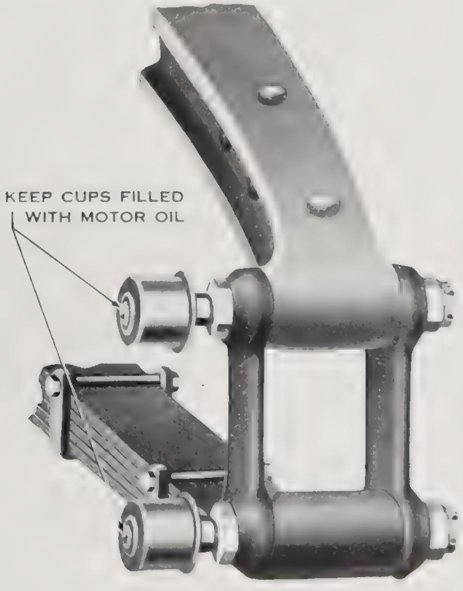
Use good transmission oil. We recommend Whitmore's Compound No. 7. If Whitmore's is used, drain once a year, strain and replace lubricant. No other attention is necessary.

Universal Joints

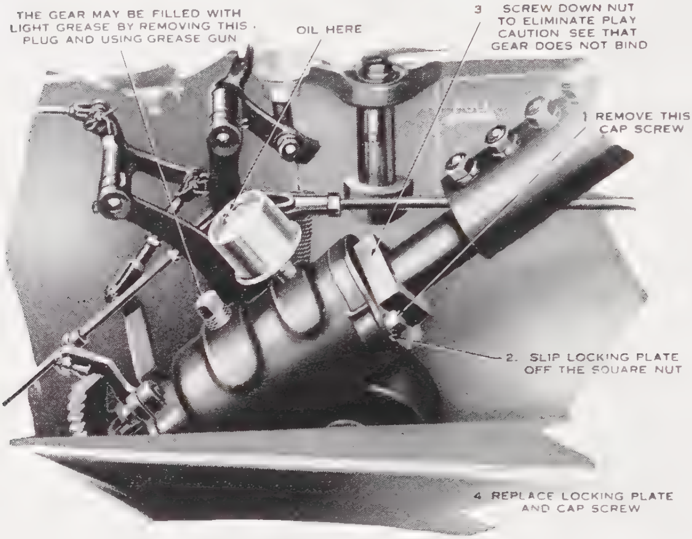


Front and rear universal should be filled every 2000 miles.

Oil Cups



Steering Gear Lubrication and Adjustment

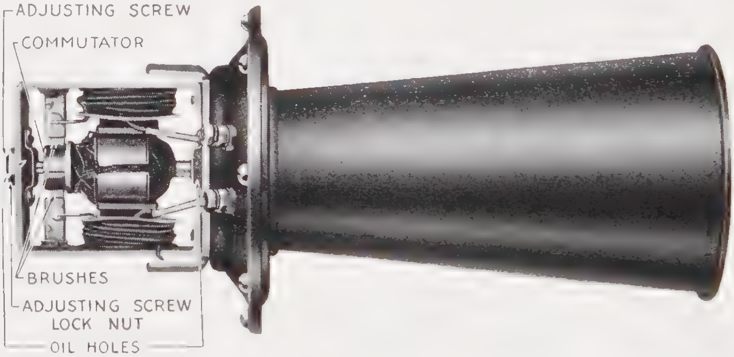

THE GEAR MAY BE FILLED WITH LIGHT GREASE BY REMOVING THIS PLUG AND USING GREASE GUN
OIL HERE
3 SCREW DOWN NUT TO ELIMINATE PLAY CAUTION SEE THAT GEAR DOES NOT BIND
1 REMOVE THIS CAP SCREW
2. SLIP LOCKING PLATE OFF THE SQUARE NUT
4 REPLACE LOCKING PLATE AND CAP SCREW

The steering gear requires little attention other than to see that lubrication is taken care of regularly.

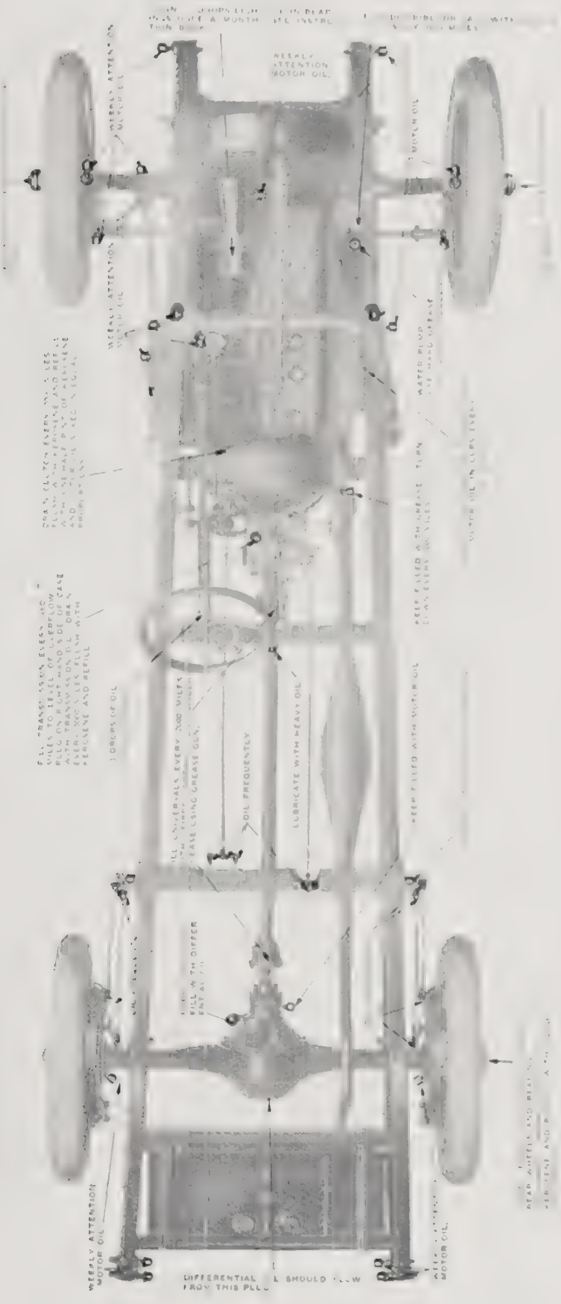
After continued service, play in the gear can be compensated for in the manner shown in the illustration.

Horn

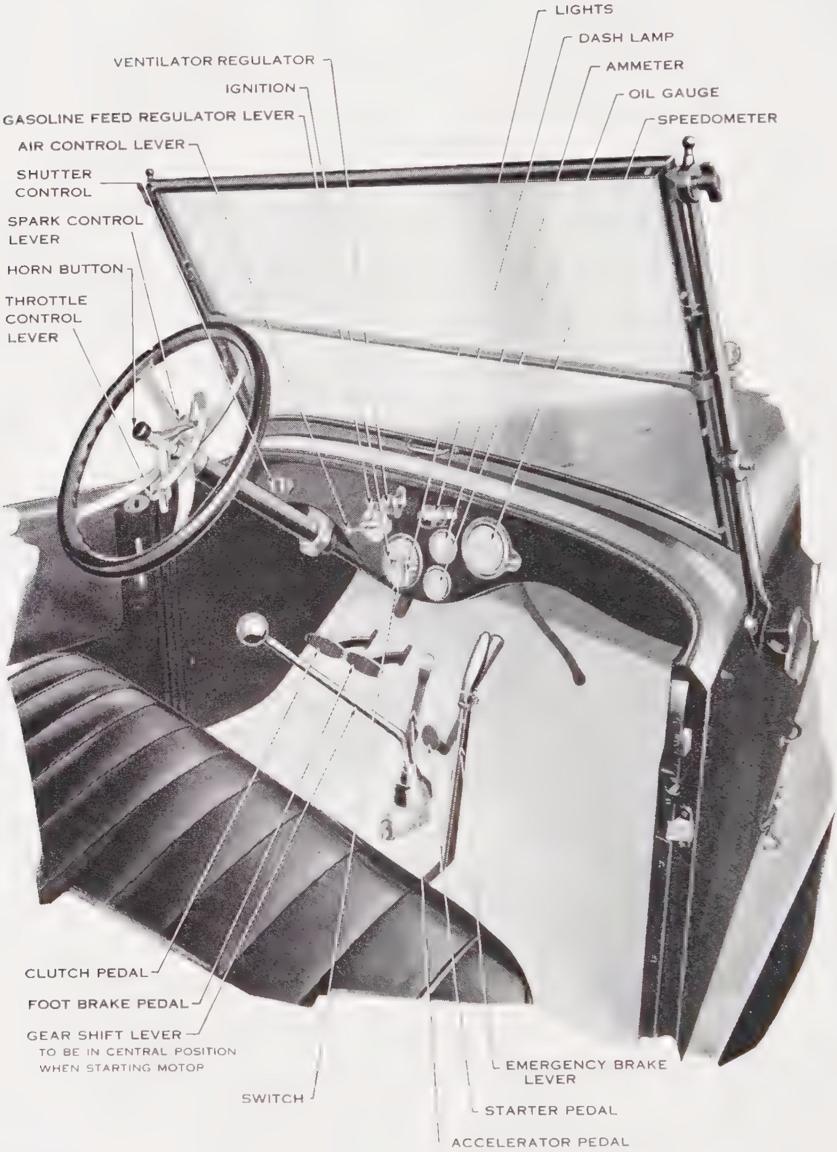
Oil horn bearing occasionally with light oil. Adjust tone when necessary by means of adjustment screw shown in illustration.



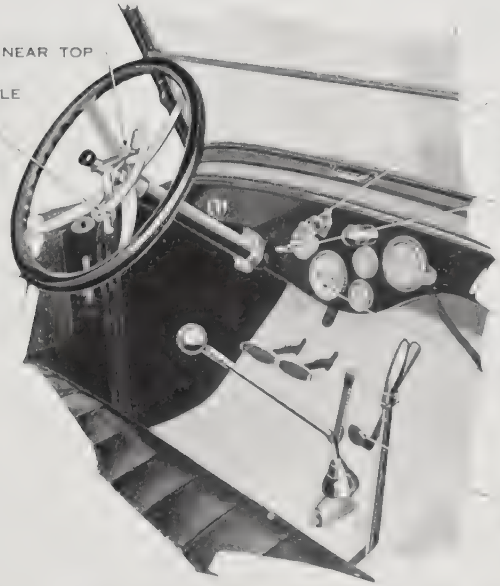
Where Horn Is Lubricated and Adjusted


ONCE A MONTH SEE INSTRUCTION BOOK
WEEKLY ATTENTION MOTOR OIL.
WEEKLY ATTENTION MOTOR OIL
WEEKLY ATTENTION MOTOR OIL
MOTOR OIL
WATER PUMP USE HARD GREASE
KEEP FILLED WITH GREASE TURN DOWN EVERY MILES
MOTOR OIL IN CUPS EVERY
DRAIN CLUTCH EVERY MILES FLUSH WITH KEROSENE AND REFILL WITH ONE HALF PINT OF KEROSENE AND MOTOR OIL MIXED IN EQUAL PROPORTIONS
FILL TRANSMISSION EVERY MILES TO LEVEL OF OVERFLOW PLUG ON RIGHT HAND SIDE OF CASE WITH TRANSMISSION OIL. DRAIN EVERY MILES FLUSH WITH KEROSENE AND REFILL
3 DROPS OF OIL
FILL UNIVERSALS EVERY 2000 MILES CASE USING GREASE GUN.
OIL FREQUENTLY
LUBRICATE WITH HEAVY OIL
KEEP FILLED WITH MOTOR OIL
FILL WITH DIFFERENTIAL OIL
REAR WHEELS AND BEARINGS
KEROSENE AND
WEEKLY ATTENTION MOTOR OIL
MOTOR OIL.
DIFFERENTIAL OIL SHOULD FLOW FROM THIS PLUG

The Instruments and Controls
What They Are For



Starting



SPARK LEVER NEAR TOP

OPEN THROTTLE A LITTLE

MOVE TO LEFT AS SOON AS MOTOR STARTS TURN TO RIGHT SEE INSTRUCTIONS BELOW

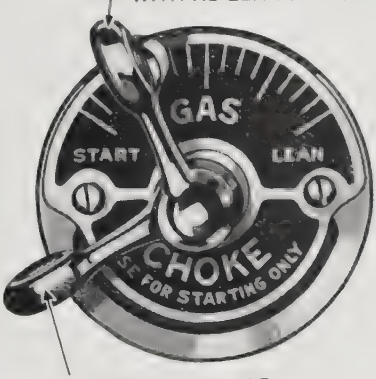
TURN ON IGNITION SWITCH

PRESS STARTING PEDAL

Important: Never press starting pedal when motor is running or you may damage the gears. Be sure flywheel has stopped moving.

These are the only carburetor adjustments and they are conveniently placed on the instrument board, controlled from the driver's seat.

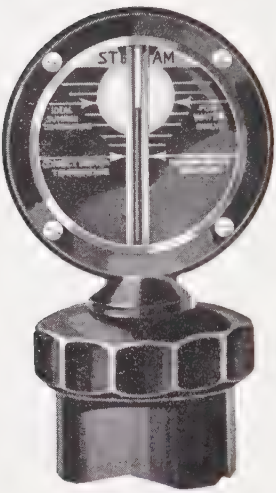
Operate your motor with the leanest mixture possible, consistent with satisfactory performance.

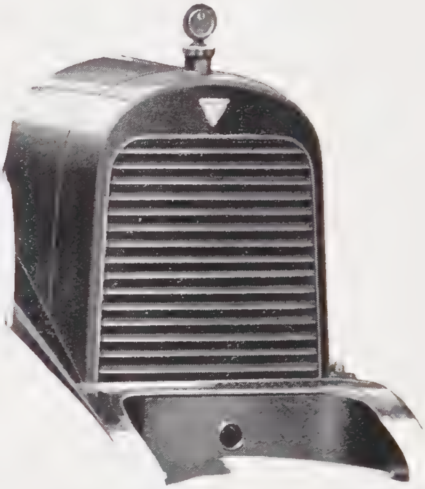


THIS LEVER CONTROLS THE MIXTURE. MOVE TO LEFT WHEN STARTING WHEN DRIVING MOVE LEVER TO RIGHT OR LEAN SIDE. ALWAYS DRIVE WITH AS LEAN A MIXTURE AS POSSIBLE

MOVE TO RIGHT AS FAR AS POSSIBLE ONLY WHEN STARTING.

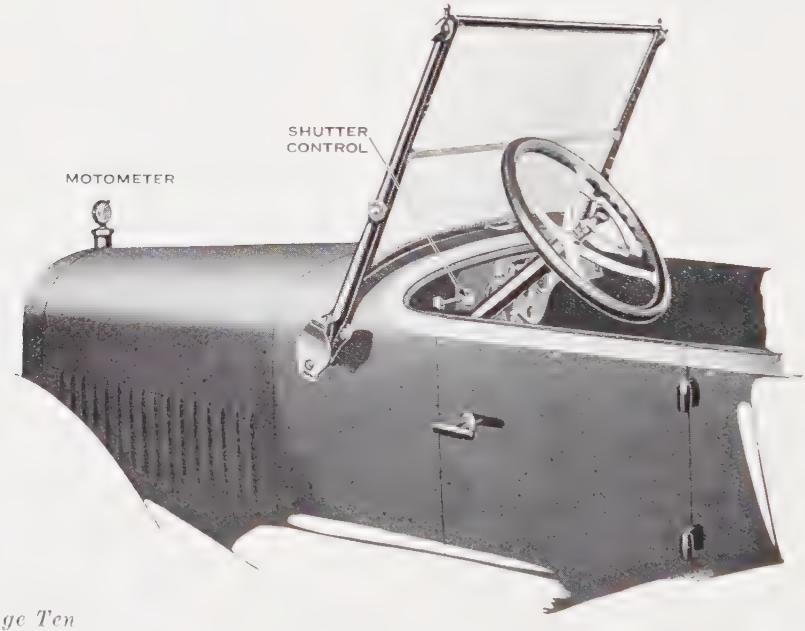
Motor Temperature Control





The radiator is provided with shutters for the purpose of regulating the operating temperature.

A standard motometer is mounted on the radiator cap which accurately indicates the temperature prevailing. Always adjust the shutters so as to maintain an efficient operating temperature as indicated by the reading on the motometer dial.



Cooling System

The cooling system should be kept filled with pure water at all times. If the water in your locality is known to contain alkali or lime, avoid its use if possible and use rain water. This may save you an expensive replacement.

See that fan belt does not slip. An adjustment is provided for taking up slack.

Never use linseed meal or similar materials to stop water leaks unless absolutely unavoidable. If you do so, have leak properly repaired at earliest opportunity and entire system thoroughly flushed out to remove all traces of the material used.

Winter Driving

The following anti-freeze mixtures are recommended:

For zero temperatures:		Below zero:	
Alcohol	30%	Alcohol	35 to 50%
Water	70%	Water	50 to 65%

Do not use kerosene or any patent compound as an anti-freeze.

Electrical System

The electrical system requires little attention other than that of proper lubrication.

Be sure that the dealer from whom you purchase your car registers it with the American Bosch Magneto Corporation branch or dealer in his territory. In due time you will receive an identification card which entitles you to a checking and inspection of your electrical apparatus free of charge at the nearest American Bosch Service Station.

This insures your service rights during the guaranty period.

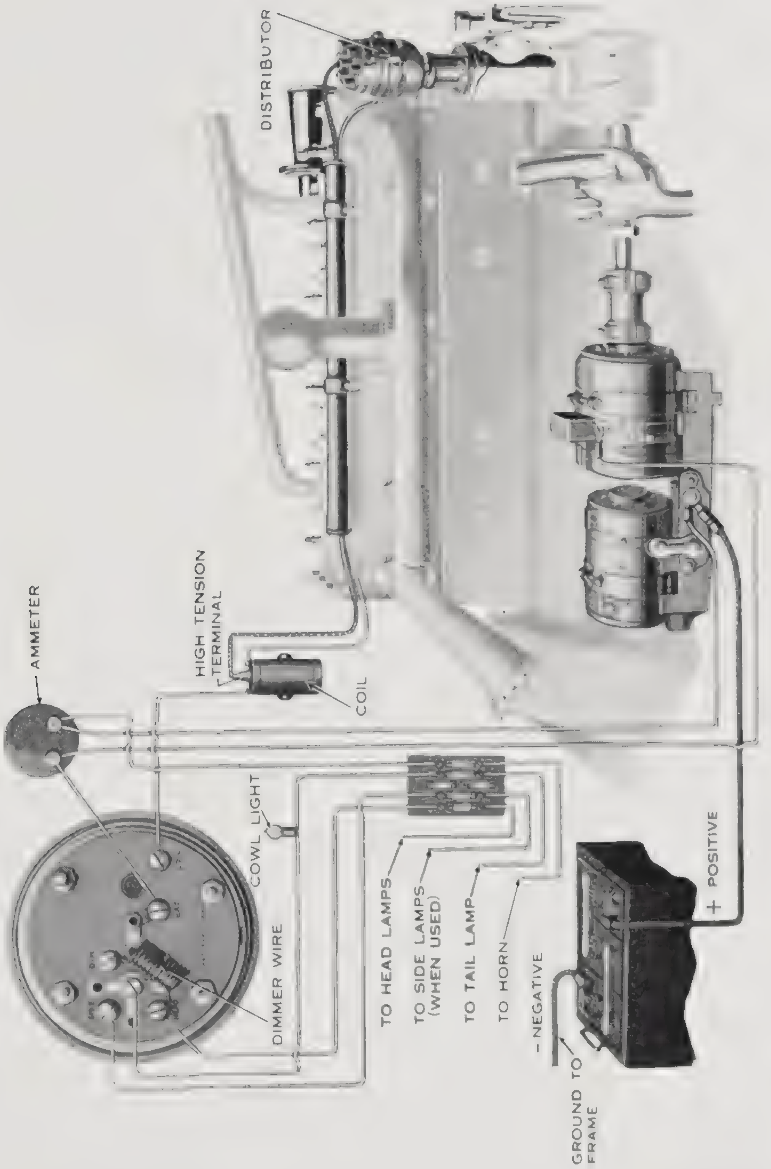
It is suggested that the first inspection be made upon receipt of registration card.

The electrical units covered by the American Bosch Magneto Corporation guaranty include:

Starting Motor
Generator
Timer Distributor
Coil
Switch
Fuse Box

Should you experience any trouble with the electrical system, have your nearest American Bosch or Hudson Service Station make correction for you.

Electric Wiring Diagram



Timing the Ignition

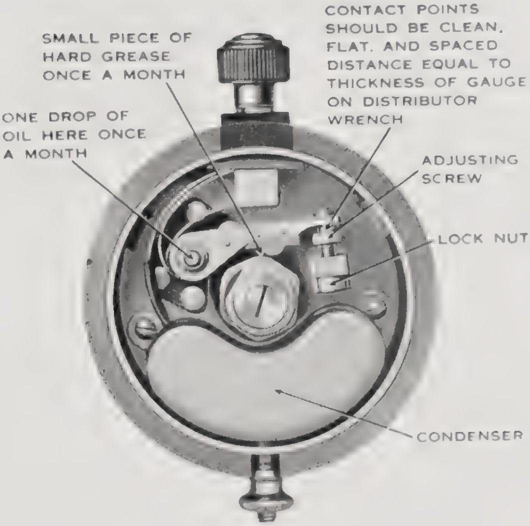
Should the ignition system ever require re-timing it may be readily timed as follows: Put the spark advance lever in full advance position (at the top of the quadrant). Take out the spark plug in No. 1 cylinder and bring the piston up on its compression stroke until the pointer on the observation hole on the flywheel case is directly over the mark "A" which is stamped on the flywheel.

Remove the distributor cap and rotor and loosen the holding screw in the timing arm. Turn the housing to the left until the interrupter points just start to open and tighten the holding screw. Replace the rotor and determine under which terminal of the distributor cap the metal segment will rest. Replace the distributor cap and connect this terminal to the plug in No. 1 cylinder. Connect the rest of the terminals to the plugs in rotation, according to the firing order of the engine, which is 1-5-3-6-2-4.

Note: Timer arm holding screw is illustrated in distributor lubrication drawing, page 3.

Warning

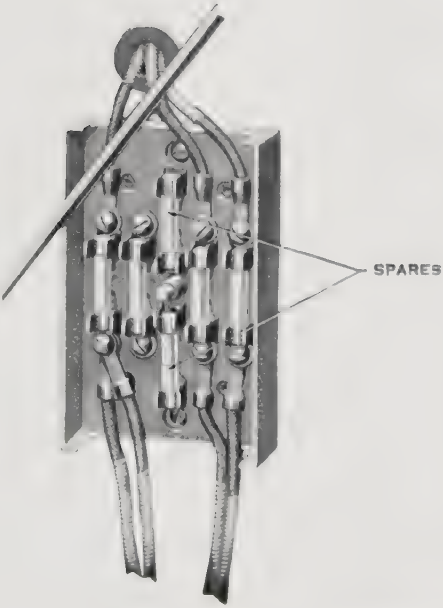
Do not attempt to make any adjustments other than those outlined, for by so doing you break the guarantee on this equipment. If you experience trouble with any of these units drive to, or get in contact with the nearest American Bosch or Hudson Service Station and have the trouble remedied.


SMALL PIECE OF HARD GREASE ONCE A MONTH
CONTACT POINTS SHOULD BE CLEAN, FLAT, AND SPACED DISTANCE EQUAL TO THICKNESS OF GAUGE ON DISTRIBUTOR WRENCH
ONE DROP OF OIL HERE ONCE A MONTH
ADJUSTING SCREW
LOCK NUT
CONDENSER

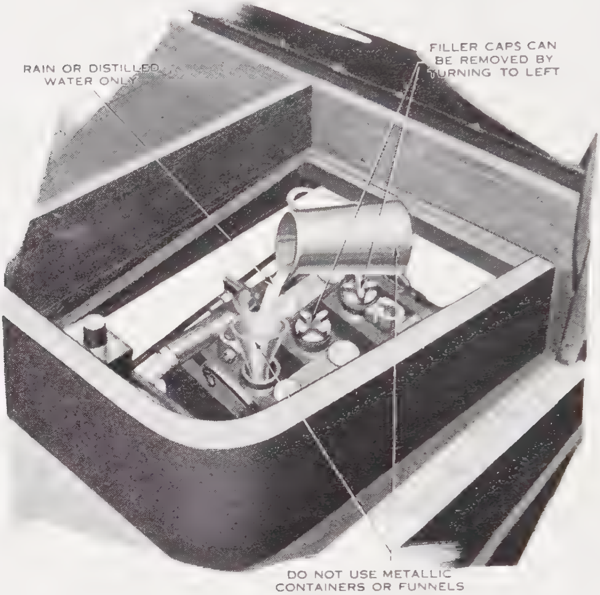
The ignition distributor requires no attention other than that pointed out in the illustration.

If lights do not burn or horn refuses to blow examine fuses. The circuits protected are stamped under each fuse. If fuse is blown examine connections in that circuit, then replace fuse.

Spares of proper capacity are provided in the center clips as shown.



The Storage Battery

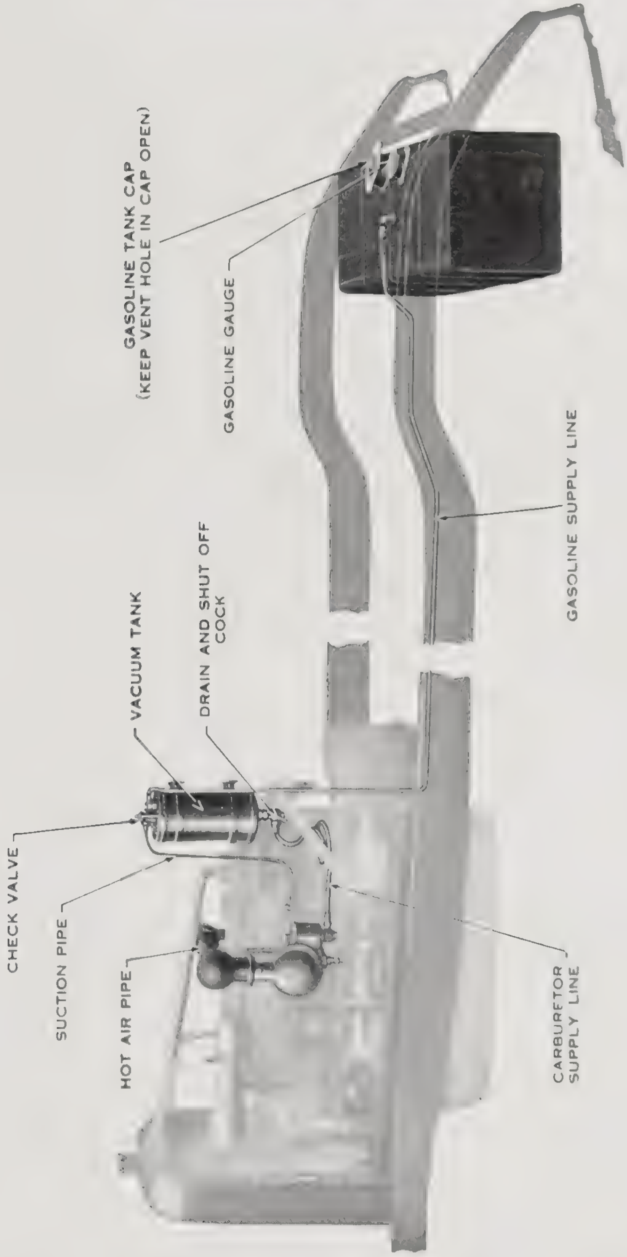

RAIN OR DISTILLED WATER ONLY
FILLER CAPS CAN BE REMOVED BY TURNING TO LEFT
DO NOT USE METALLIC CONTAINERS OR FUNNELS

The only attention required by the battery is to occasionally add distilled water or rain water caught and retained in a non-metallic container. Inspect every two weeks in the summer time and every three to four weeks in cold weather. Remove vent cap by turning to left. When replacing, tighten securely. Keep terminals tight.

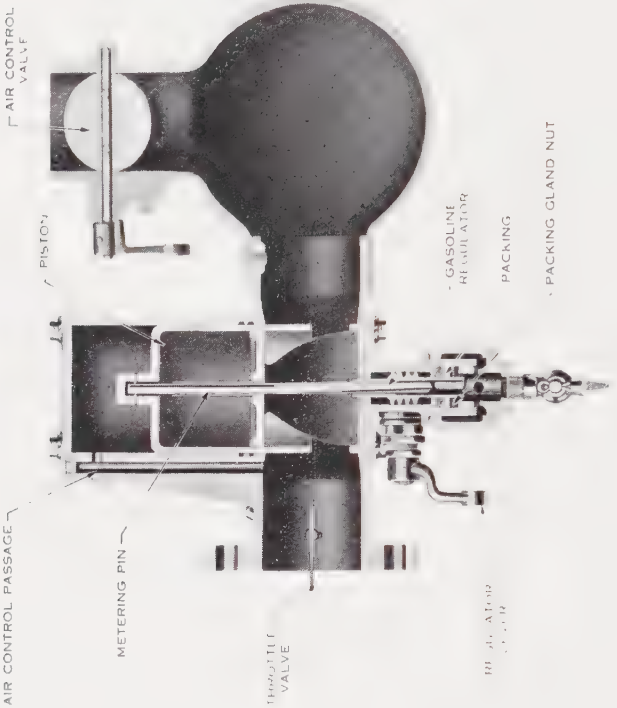
A thin coating of vaseline on terminals will prevent them from corroding.

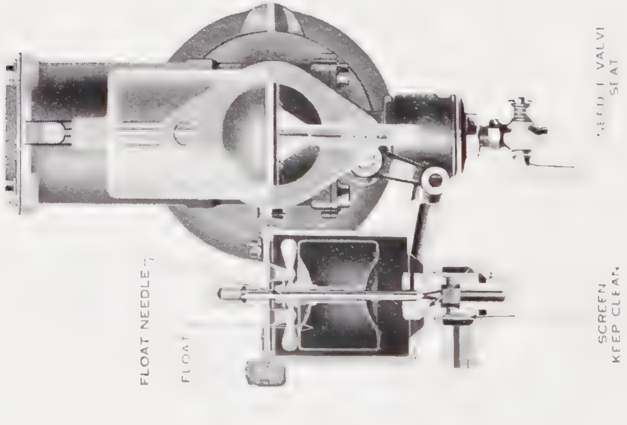
Your local battery station will inspect your battery, add water. and advise you as to its condition. This service is rendered free of charge.

Gasoline System

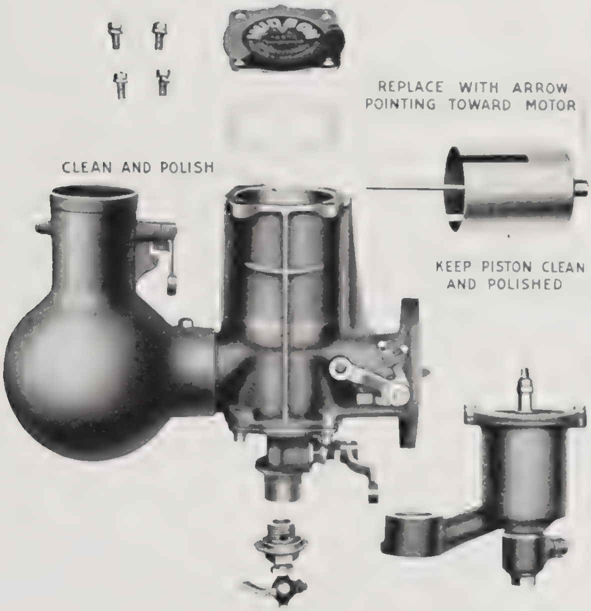


The Carburetor





Carburetor

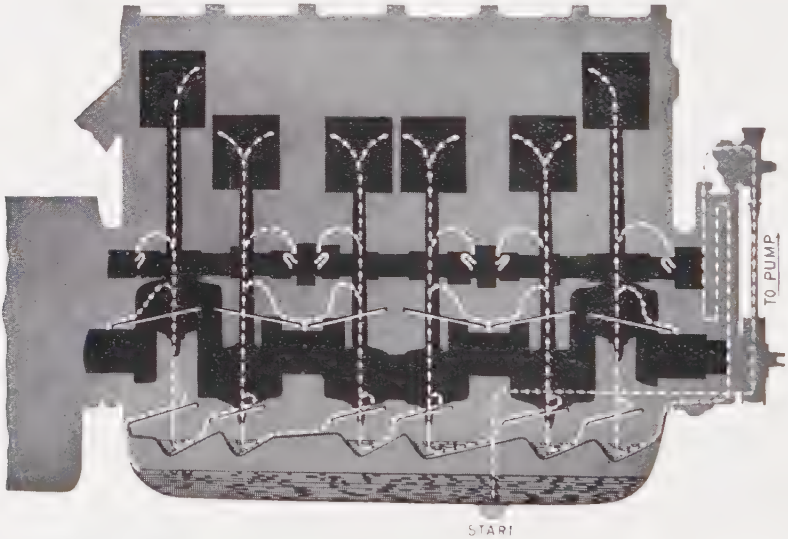

REPLACE WITH ARROW POINTING TOWARD MOTOR
CLEAN AND POLISH
KEEP PISTON CLEAN AND POLISHED

All carburetor adjustments are taken care of by the dash controls. The carburetor consists of but few parts and they require attention only at long intervals. If the motor starts hard or shows a tendency to stop when running at slow speed, it indicates that the piston is dirty. Remove cover as shown in illustration and polish the piston with whiting and oil, silver polish or metal polish. Never use sand paper, emery cloth or anything that will roughen the surface. When replacing, make sure that the slot in the long pin fastened to the piston points toward the motor.

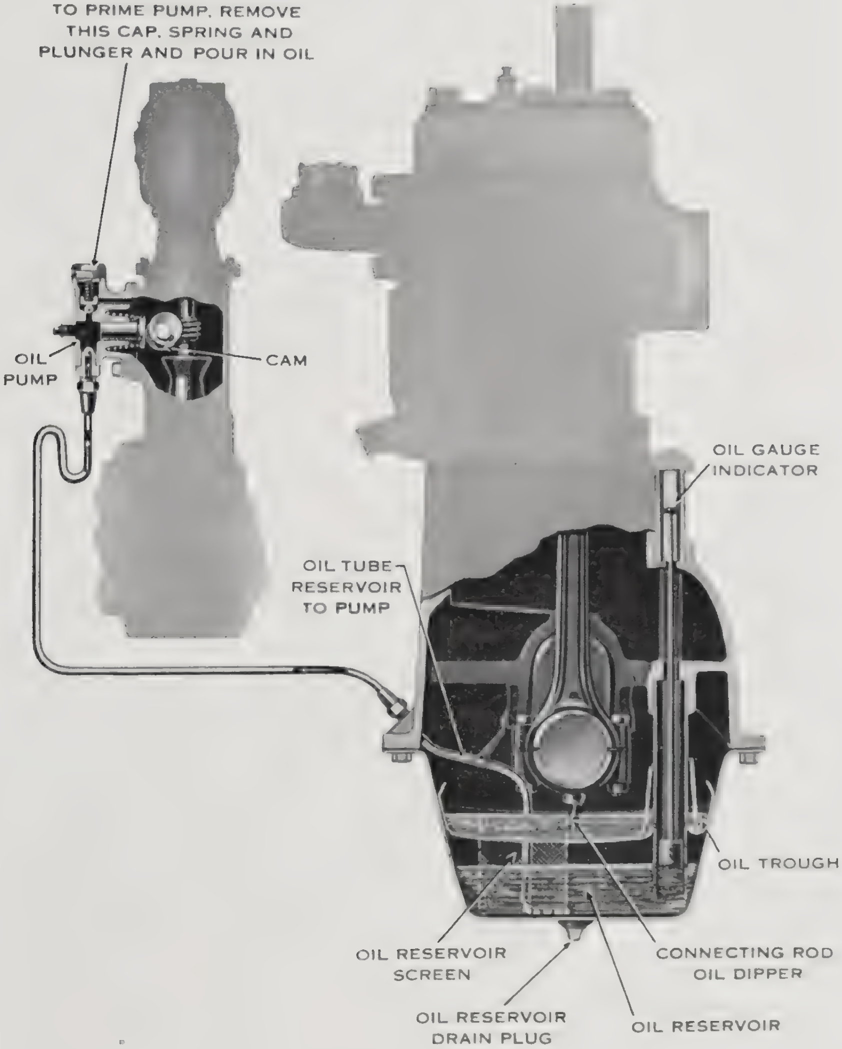
Oiling System

Lubrication of the Hudson motor is taken care of by a constant level circulating splash system of special design. It automatically takes care of the motor's requirements by increasing the flow of oil as the throttle is opened and reducing it proportionally as the throttle is closed. This feature is positive and requires no attention from the driver. The oil circulates freely through the motor, there being no drilled parts or small pipes to become clogged and interrupt the flow of oil. The illustration below shows the travel of oil through the motor.

The oil gauge on the instrument board does not register the pressure on the oil. It simply indicates that the oiling system is functioning and therefore the actual reading is not important. The gauge should register, however, when the motor is running. If it does not, do not run the motor until correction has been made. Failure of the gauge to register usually indicates one or more of the following conditions existing:—Lack of oil in reservoir; diluted, dirty oil, preventing pump valves from seating properly; air leak or loose connection at one of the pipe joints. Dirt in the valves can often be dislodged by priming the pump. To do this, remove cap on top of pump (see illustration, page 21) lift out small spring and plunger and pour in clean oil. When replacing, make sure that spring has tension on plunger and tighten cap securely. Then have contents of reservoir drained and new oil added at first opportunity.



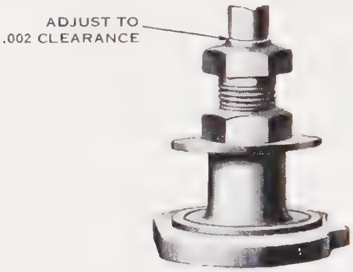
Details of Oiling System


TO PRIME PUMP, REMOVE THIS CAP, SPRING AND PLUNGER AND POUR IN OIL
OIL PUMP
CAM
OIL GAUGE INDICATOR
OIL TUBE RESERVOIR TO PUMP
OIL TROUGH
OIL RESERVOIR SCREEN
CONNECTING ROD OIL DIPPER
OIL RESERVOIR DRAIN PLUG
OIL RESERVOIR

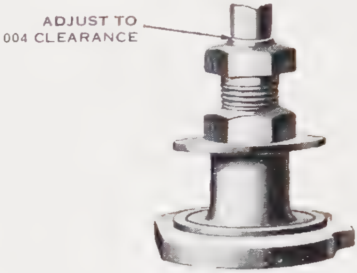
General Inspection

Valve Tappets

The valve tappets should be carefully adjusted when the motor is warm. If they are set too closely the valves may burn. Adjust them according to the clearances shown and they will run quietly and satisfactorily.



Inlet Valve



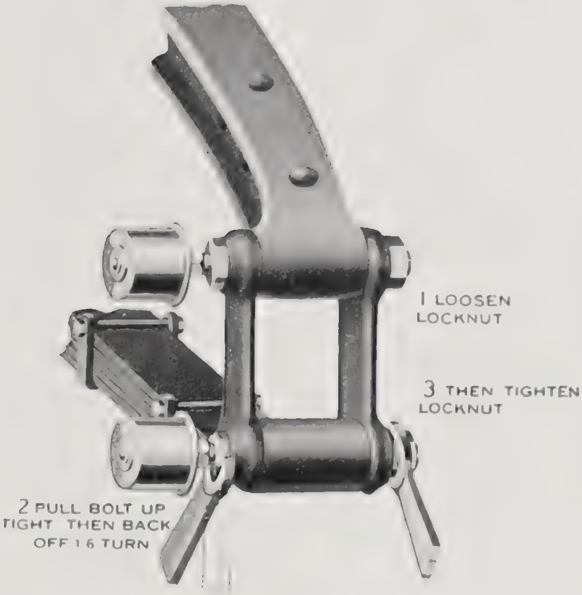
Exhaust Valve

Spark Plugs

When spark plug replacements become necessary we suggest that you purchase the same type that we supply with the car. For best results the points should be set to a clearance of .025 inches.

Vacuum Tank and Carburetor

These parts are equipped with drains and it is advisable to occasionally drain out any sediment or water that may have collected. This is of special importance in the winter time when such accumulations may freeze and stop the flow of gasoline.



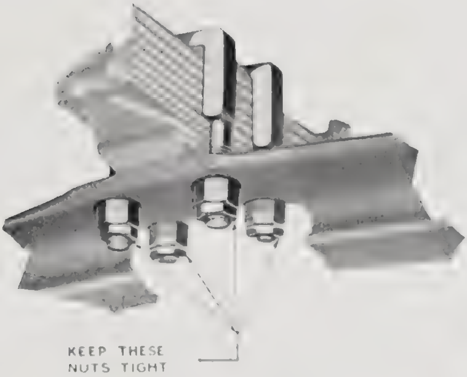
Spring Shackles

The spring shackles are provided with an adjustment by means of which all play can be taken up in a few minutes, thereby eliminating all annoying rattles at these points.

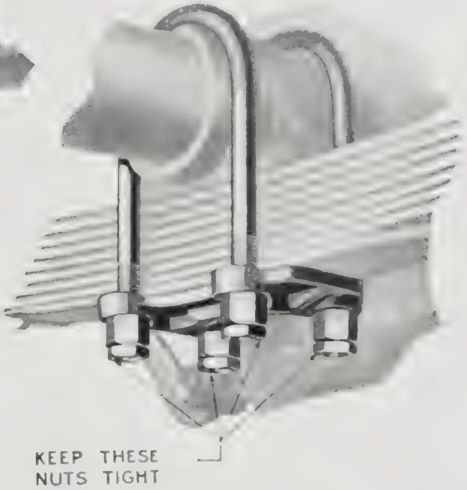
Do not tighten too much or you will interfere with the action of the springs. Follow the instructions given closely.

Spring Clips

Spring breakage can usually be attributed to loose spring clips—those clips that secure the springs to the axles.



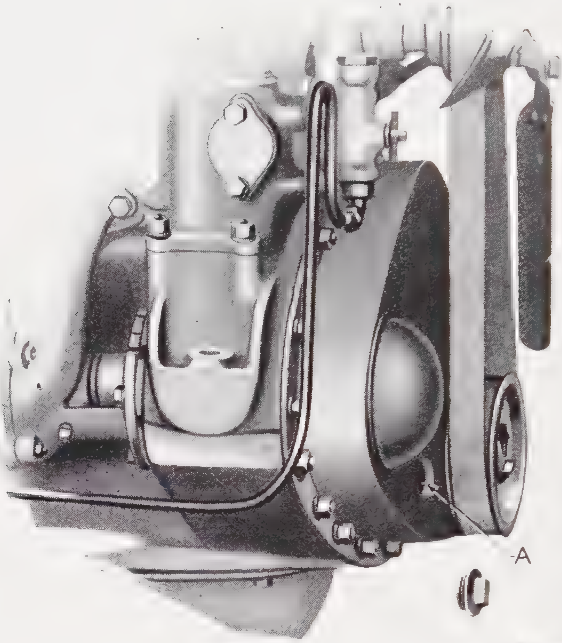
It is recommended that these clips be inspected occasionally for tightness.

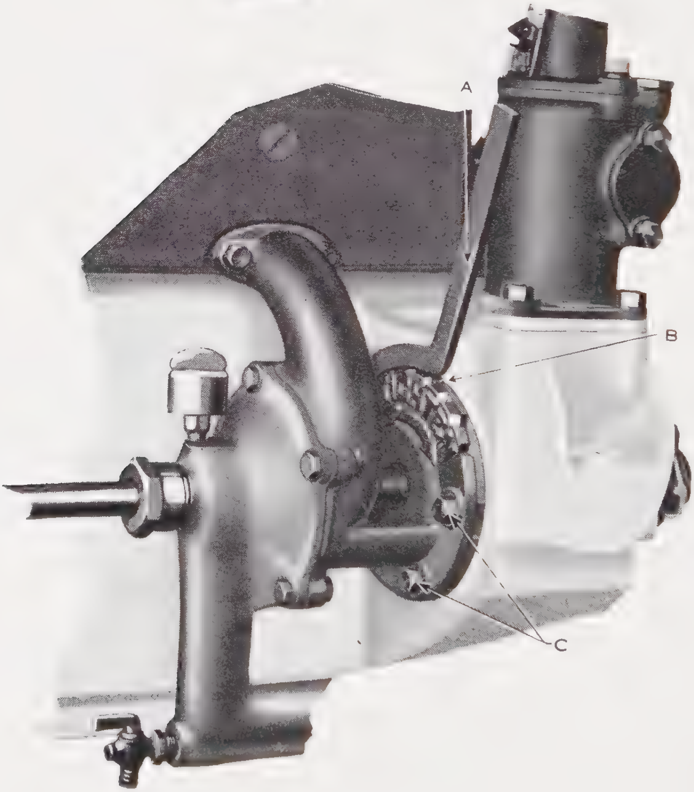


The Chain

The camshaft and accessory shaft is driven by a chain which is provided with means of adjustment. At the expiration of from 500 to 1000 miles driving, it is advisable to determine if the chain requires taking up. Subsequent inspections at intervals of 4000 miles are recommended. To inspect chain proceed as follow:

Remove inspection plug "A" on chain cover. The chain can be felt here and if the up and down movement is much greater than $\frac{3}{4}''$ the chain requires taking up.

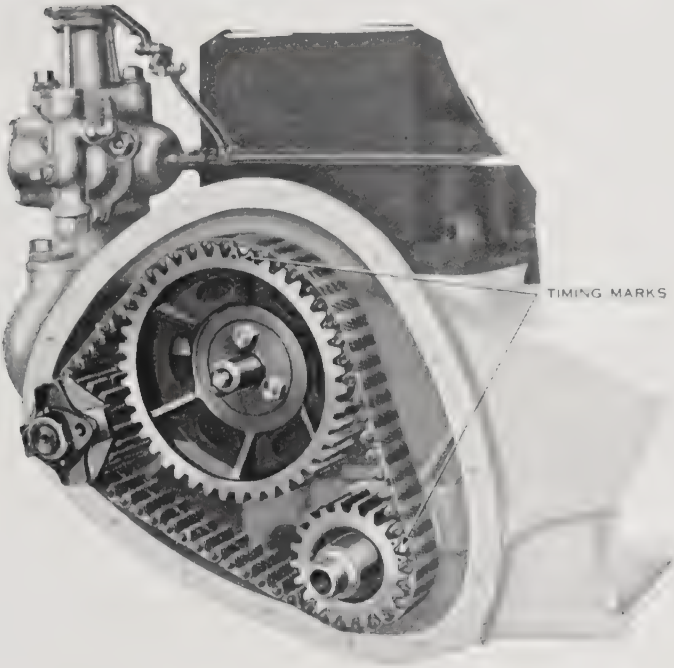




To adjust chain:

Take out the bolts "C" by means of the special wrench "A," turn the flange until you can feel $\frac{3}{4}''$ up and down movement in the chain. Then replace the bolts. If it is necessary to shift the flange slightly to get the bolts to line up, do not adjust any tighter or you will overload the bearings.

The Chain Timing



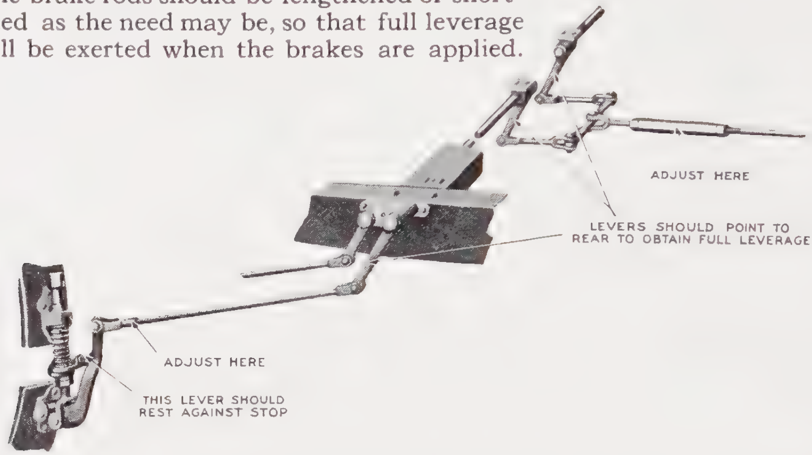
The crankshaft and camshaft gears are punch-marked as shown in illustration—and these marks should coincide with the punch-marks on the chain pins.

The chain is endless and to remove it for the purpose of inspection or to install new chain it is necessary to remove the camshaft gear. When installing the chain, make sure that the arrows stamped on the side of the links point in the direction that the chain runs. It will not function otherwise.

Make sure that the small gear which drives the generator and the ignition apparatus is not disturbed. Instructions for timing the ignition will be found on page 14.

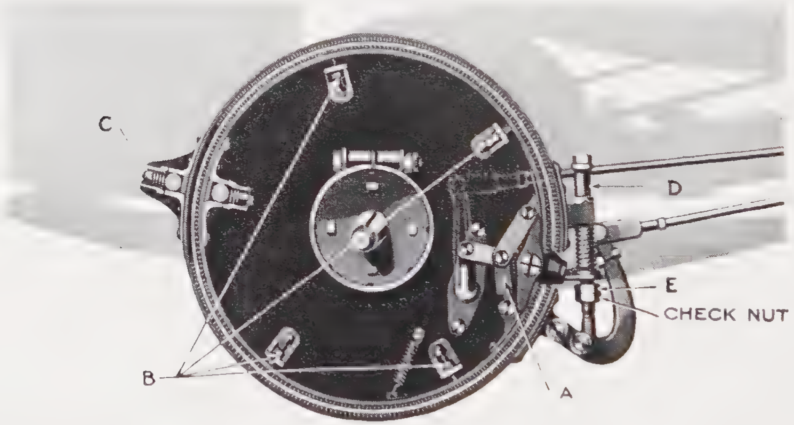
Brake Adjustments

Before taking up the brake bands, it is necessary to inspect the brake rods to make sure that they are in proper position. The brake levers on the equalizer under the frame cross member should point to the rear. The brake rods should be lengthened or shortened as the need may be, so that full leverage will be exerted when the brakes are applied.


ADJUST HERE
LEVERS SHOULD POINT TO REAR TO OBTAIN FULL LEVERAGE
ADJUST HERE
THIS LEVER SHOULD REST AGAINST STOP

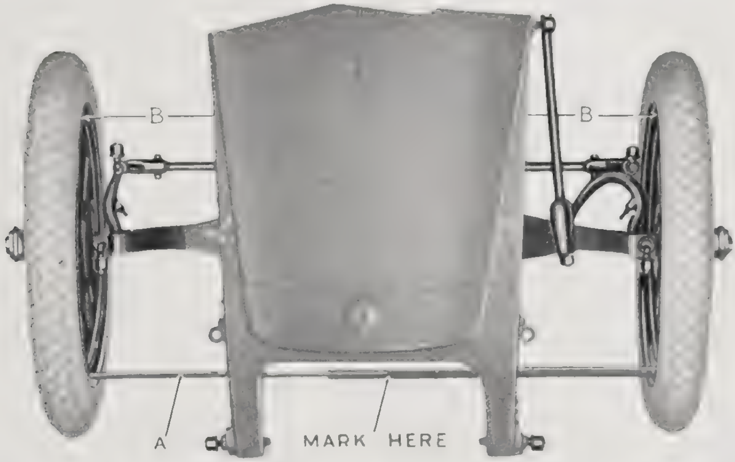
1. Remove cotter pin and turn adjustment "C" in until the band just clears the drum by the thickness of a heavy business card.
2. Turn check nut and nut "E" down, thereby raising the lower half of the band until it just clears the drum by the thickness of a heavy business card.
3. The upper half of band can then be brought down to just clear the drum by the adjusting nut "D." Always follow this procedure when adjusting the foot brake.

The adjustments "B" are for the purpose of making the internal brake bands conform to the drum.

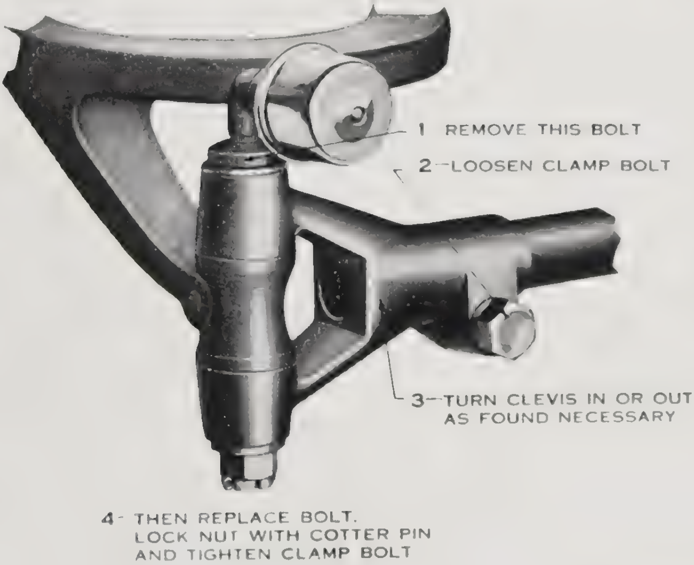


Wheel Alignment

The alignment of the front wheels has a very important bearing on the life of the front tires. The alignment can be easily checked by measuring the distance between the rims—front and rear—as shown in the illustration. Dimension "A" to be $\frac{5}{16}$" to $\frac{3}{8}$" less than "B."



The steering cross rod has an adjustable clevis. To adjust front wheels to proper "toe in" proceed as shown in illustration.



Winter Driving

There are four things to take into consideration when operating your car in freezing weather. They are Lubrication, Cooling System, Storage Battery, Hard Starting.

Lubrication

Oils are affected by temperature medium or heavy oils thicken or congeal and the pump will not handle them. Use only light oil that will stand a low cold test in freezing weather.

Cooling System

The water in the system must be completely drained off to avoid damage due to freezing of water. Drain tap is located in water pump connection.

If the car is operated in winter time, use the anti-freeze mixtures we recommend, see page 11.

Storage Battery

During the winter months lights are burned for longer periods of time, and starting motor requires more current to start the motor. This naturally drains the battery more quickly. Let your nearest battery station inspect the battery and advise you as to its condition frequently.

Starting

Move upper or gas control lever to extreme left position marked "Start." Close choke (lower lever) and crank for 3 or 4 revolutions, then open choke a little to give motor air. When motor starts, adjust choke to keep motor running, gradually giving motor more air as it warms up. The upper or gasoline adjusting lever should be moved to a central position and when driving can be carried to right of center to advantage. Always run upon the leanest possible mixture consistent with satisfactory performance.

Always keep shutter closed unless motometer registers too high—see page 10. Always close it when you stop, to conserve the heat.

Should you ever resort to hand cranking because battery is low, proceed as follows:

1. Prime by cranking with choke closed and gasoline regulator in "Start" position for 4 or 5 revolutions, or remove spark plugs and put about one spoonful of gasoline in each cylinder.

2. Retard spark, throw on ignition switch and turn motor over with hand crank.

3. As soon as motor starts, advance spark as soon as possible and manipulate choke control to keep motor running until it warms up.

Diagnosis of Trouble

Starter Does Not Work

1. Loose battery connections. The terminal clamps on the battery should be kept tight and coated with vaseline to prevent corrosion.
2. Storage battery run down. Let your battery station advise.
3. Trouble in starter motor. Have American Bosch Service Station examine.

Failure of Motor to Start

1. Water in gasoline. Drain from bottom of carburetor and vacuum tank.
2. Ignition contact points dirty. See page 15. Clean by pulling a piece of fine (00) sandpaper between them.
3. Motor flooded with gasoline caused by excessive choking.

If Motor Stops

1. Out of gasoline. Check main tank.
2. Vent in gasoline tank plugged. Vent is located in filler cap.
3. Loose wires or connections.
4. Out of motor oil, usually indicated by knocking followed by an abrupt stop. Do not attempt to use motor until oil supply has been replenished and motor examined by a competent mechanic.

Reasons for Motor Missing

1. Driving with cold motor. Close radiator shutter until it warms up.
2. Too rich a mixture. Gas regulator too far to left or starting side.
3. Clean spark plugs and set points at .025″ clearance.
4. Tappets set too close together so that valves will not close—see page 22.

If Motor Lacks Power

1. Too rich a mixture.
2. Late ignition. Instructions for timing ignition will be found on page 14.
3. Dragging brakes. The car should roll freely on a level surface.
4. Low tire pressure. Keep tires inflated to pressure recommended by tire manufacturer.

If Motor Knocks

1. Spark advanced too far. Retard hand lever at steering wheel slightly if found necessary when climbing grades or traveling heavy roads at slow speeds.
2. Motor speed too low for high gear. It is better to shift to second speed than to make the motor labor against adverse conditions.

Diagnosis of Trouble—Continued

Reasons for Overheating

1. Water supply low.
2. Cooling system dirty. Dissolve about two pounds of sal soda (washing soda) in hot water and pour in radiator. Run car for about ½-hour, then drain and flush twice with pure water.
3. Hose connections in bad shape. Remedy is to replace.
4. Lack of motor oil. See that oil gauge on dash is working.
5. Loose or broken fan belt.
6. Late ignition timing or driving with spark lever on steering quadrant retarded, see page 14.
7. Using too heavy an oil. Use only high grade light oil and change it at least every 1,000 miles.

In General

1. Clutch slipping. Wash out clutch and oil according to instructions on page 4. See that pedal does not ride floor board.
2. Rear axle noise. See that differential has sufficient lubricant and be sure pinion shaft immediately forward of axle is lubricated. The oil cup can be removed and oil forced in by means of an oil gun.
3. Play or take up in rear springs when clutch is engaged. Loose spring clips or loose spring shackles. See page 23.

Washing the Car

Never allow mud to remain on the finish for any length of time. If the mud has dried, it must first be softened and loosened by flowing water on it before attempting to rub it off. All mud and dirt accumulations contain sand and grit and the finish will be marred unless due precaution is exercised in its removal.

Never use soap on the body—unless to remove grease or dirt that pure water will not dislodge—and then sparingly. Use only soap especially prepared for body washing.

Dust accumulations should never be wiped off with a rag. Secure a wool or feather duster and use that to avoid scratching the finish.

An occasional polishing with good polish is recommended. Do not use any so-called patent preparation without first consulting your dealer or service station as to its merits.

The outside varnish finish is the protective coat and must be preserved. An entire re-finish can usually be avoided by an occasional varnish re-finish when the car has seen extensive service. Your dealer or painter will be glad to advise.

Caution

Specify Genuine Hudson Parts When Repairs Are Necessary

When a motor car is repaired the usual operation is that certain worn parts are taken from it, and new parts installed in their place. The car is thus renewed for continued service.

It is obviously important that the replacements should be identical with the ones removed and that the installation should be made by men specially trained for this particular work.

However, there are on the market may counterfeit parts which are sold within the trade on long wholesale discounts. The owner pays the top price.

Our own metallurgical department has examined many such parts. They are lacking in the elements which make for long life. Often they are inaccurately made, and in some instances several ounces heavier or lighter than the replaced parts, which has an injurious effect on the balance, smooth-running and endurance of the car.

Another type of parts often urged for sale are so-called "special parts" such as piston rings, carburetor accessories or added or substitute electrical equipment. Miraculous results are promised the car-owner if he will install these various devices. The sad fact is that these results do not materialize. Sometimes these various special parts are almost as good as the ones already in the car. But they are not built for the specialized requirements of our own cars, as are the standard parts carried by Hudson dealers.

To protect yourself and your automobile investment you will find it best to have all repair work done with genuine Hudson parts at an authorized Hudson Service Station. If you wish to make minor repairs yourself, or circumstances make it impossible for you to have the work done at an authorized Hudson Service Station, be sure that genuine Hudson parts are used.

To take any other course is to invite difficulty and dissatisfaction.

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Hudson Information

License Applications

Serial number (see plate on front of dash under hood).

Motor number (stamped on left front motor leg).

Diameter of bore, 3½″.

Stroke, 5″.

Standard horse power rating for license purpose, 29.4.

Shipping weights of cars produced 1922-23 season:

Coach	3435	Lbs.
Speedster	3395	"
Phaeton, seven passenger	3445	"
Sedan, seven passenger	3720	Lbs.
Chassis	2690	"

Miscellaneous

Firing order of cylinders—1-5-3-6-2-4.

Spark plugs—metric thread.

Capacity of cooling system—4½ gallons.

Capacity of gasoline tank—19 gallons.

Lamp bulb sizes—headlight, 6-volt, 21 c. p., nitrogen, single contact. Dash and tail light, 3-volt, 2 c. p., single contact.

Fuses—Circuit fuses located in fuse box, 10 ampere. Generator field fuse, 5 ampere.

Printed in U. S. A.

ASTORIA HOUSEHOLD DIRECTORY*

1896-1954 Address 384 31st
Post-1955 Address 656

1890 If not shown here but house existed then, refer to 1890 & 1893-94 list in library.

1893-94 Same as above.

1896

1902
Olsen, Martin

1904
Kanto, August
Matta, John P.

1906
Leina, Elias
Maatta, Carl, Jennie, Peter J.

08-09
Hummasti, Able
Leina, Elias
Maatta, Jennie, Carl, J. Peter

1910
Arvila, Arthur W.
Kanto, August

1913
Aarvola, Asaria
Kanto, August, Rega
Luoto, Andrew

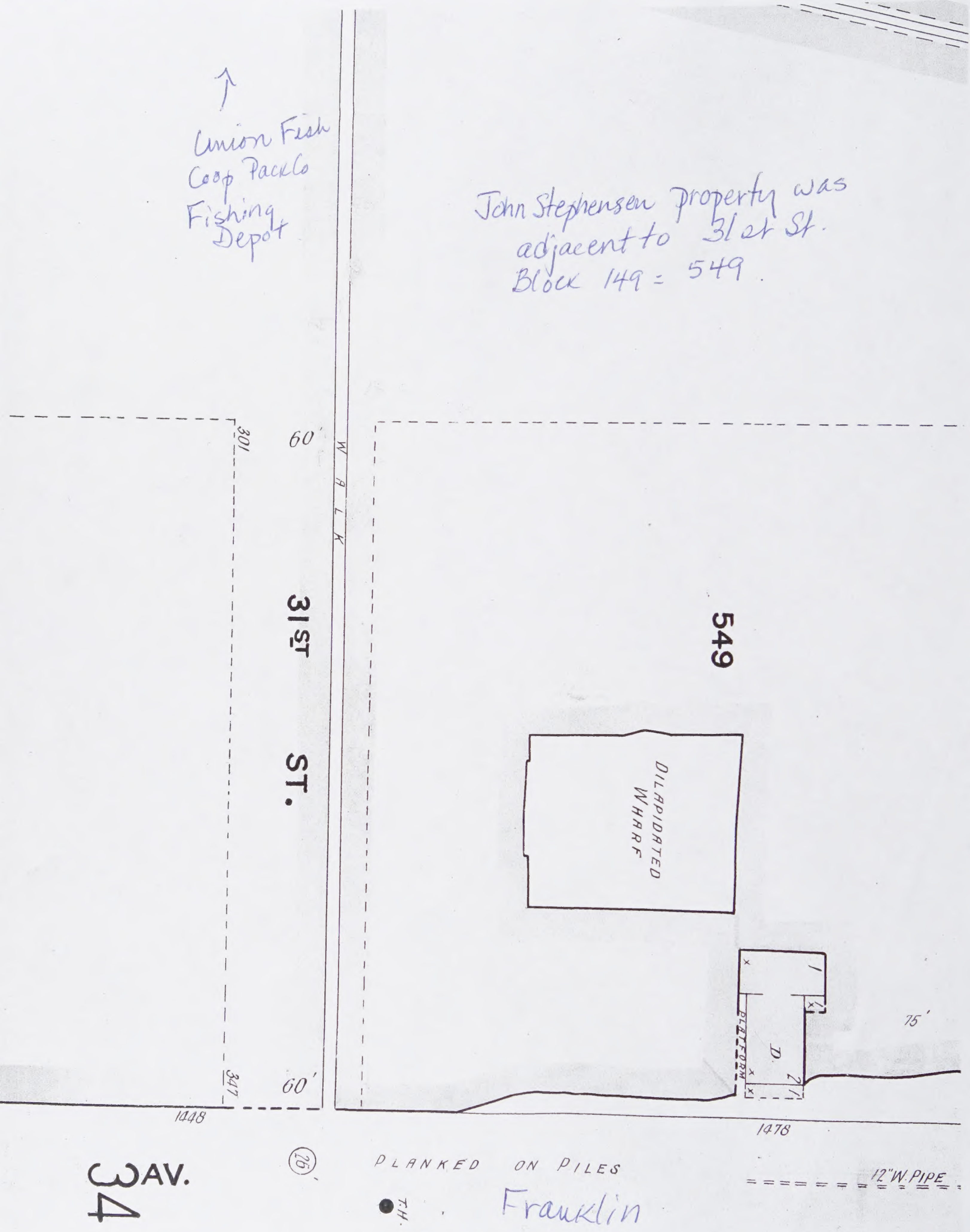
1915
Kanto, August, Rega
Luoto, Andrew
Pitkanen, Charles, Jennie
Wainanen, Paul

1917-18
Anderson, Nels
Kanto, August, Erika
Kemppainen, Matt
Olsen, Charles
Pitkanen, Charles, Jennie
Sirnia, John
Wainama, Paul

1920-21
Matta, Carl E.
Matta, John P., Margaret
Russell, John I., Sophie

1925
Matta, Carl E., Martha, Pete, Margaret

After 1925, consult colored section of Polk directories. Astoria Public Library has a complete collection of all that have been published.* This edition was compiled in 1981 by CETA employee Clifford Pearsall under the direction of Bruce Berney, Library Director.



Union Fish Coop Pack Co Fishing Depot

John Stephensen property was adjacent to 31st St. Block 149 = 549.

Franklin

34

LP